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February 9, 2017
File: 160950528

Attention: Ms. Tara Wilcox
Supervisor, Waste Management Services (Compliance)

The Regional Municipality of Durham
1835 Energy Drive
Clarington, ON L1E 2R2

Dear Ms. Wilcox,

Reference: Q4 2016 Ambient Air Quality Monitoring Report for the Durham York Energy Centre – Crago Road Station

Please find attached with this letter the Q4 2016 quarterly report for the Durham York Energy Centre (DYEC) Crago Road Station. This quarterly report provides a summary of the measurements collected at this station during October to December 2016 (calendar Quarter 4 of 2016).

Regional Council has requested that 98th percentile PM_{2.5} data also be provided along with the quarterly reports, which is provided in Table 1 below. A comparison to the Canadian Ambient Air Quality Standard (CAAQS) for PM_{2.5} requires averaging the 98th percentile daily average levels in each of three consecutive calendar years. The values presented in Table 1 corresponds to the 98th percentile over the two years of monitoring at this station (November 2014-October 2016) and the first 2-months (November 2016 to December 2016) of the third year. An additional 10 months of data will be required to provide a comparison to the current CAAQS criteria of 28 µg/m³. Please note that for explicit comparison to the CAAQS for PM_{2.5}, use of annual data based on calendar years is required, rather than the annual periods based on the start of the monitoring as presented in Table 1. Also, to be statistically significant, a minimum of 2-years of data is required for an initial comparison, with 3-years of data required for explicit comparison. The annual periods based on the start of the monitoring presented in Table 1 are, however, a good initial indication of conformance to the CAAQS standard for PM_{2.5}. The data in Table 1 should be considered preliminary and is included to provide an initial indication of ambient PM_{2.5} level compliance with respect to the CAAQS until 3-calendar years of data have been collected.

Annual average PM_{2.5} concentrations are provided in Table 2. As with the 24-hour CAAQS for PM_{2.5}, an explicit comparison to the annual CAAQS for PM_{2.5} requires annual data based on three consecutive calendar years (with a minimum of 2-years of data required for an initial comparison and 3-years of data required for explicit comparison). The annual periods based on the start of monitoring presented in Table 2 provide an initial indication of conformance to the annual PM_{2.5} CAAQS of 10 µg/m³ (until 3-calendar years of data have been collected).



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Page 2 of 2

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Table 1 Summary of the 98th Percentile Daily Average PM_{2.5} Concentrations Measured to Date (µg/m³)

Period	Crago Road Monitoring Station
November 2014 – October 2015 (Year 1)	20.5
November 2015 – October 2016 (Year 2)	23.3
November 2016 – December 2016 (2 months of data)	48.6 ¹

Note: 1 As only 2 months of data are presented, this data is not comparable to the CAAQs

Table 2 Summary of the Annual Average PM_{2.5} Concentrations Measured to Date (µg/m³)

Period	Crago Road Monitoring Station
November 2014 – October 2015 (Year 1)	6.6
November 2015 – October 2016 (Year 2)	6.7

Regards,

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